UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *15 October 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-3,5-13 and 15-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *4 and 14* is/are allowed.

6) ☒ Claim(s) *1-3,5-13 and 15-20* is/are rejected.

7) ☒ Claim(s) *5* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *15 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *12/30/05*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 5 is objected to because of the following informalities:

    a.   The statement "temporally adjacent to the media object with a greater

frequency of repeat instances than any other media object" is vague and unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

        Regarding claim 5, although the specification describes what is meant by

"most popular" media object it does not teach a "most-related" media object nor

how such is derived.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1, 2, 7, 9, 10, 13, 15, 17 and 18 are rejected under 35 U.S.C. 102(b) as

being anticipated by Kanevsky et al. (U.S. Patent No. 6,434,520 B1).

Regarding claim 1, Kanevsky discloses a processor-readable medium

comprising processor-executable instructions (see [column 2 lines 28-35] for a

program tangibly embodied on a program storage device) configured for:

receiving a request for information regarding a media object (see [figure 3 no.

301 and 302], [figure 4a], [column 1 lines 57-60], [column 8 lines 49-61], [column

9 lines 4-9] for user queries used to request information about media objects);

inferring the information from repeat instances of media objects ([column 9 lines

34-46], [column 10 lines 10-24] for identifying matching (repeating) media

segments that have similar or matching voiceprints) occurring within one or more

media streams (see [column 2 lines 57-66] for a type of media stream; see also

[column 1 lines 17-27], [column 1 line 61 through column 2 line 4], [column 2 line

60 through column 3 line 4] for multiple media sources such as, radio, television,

video, telephone, and data streams from which media objects can occur, etc.);

and returning the information (see [column 2 lines 1-4], [column 9 lines 4-9] for retrieving/ obtaining audio segments resulting from the search).

Regarding claim 2, Kanevsky discloses all of the limitations of claim 1 including wherein the inferring comprises searching a database for the information (see [column 1 lines 7-15], [column 1 line 57 through column 2 line 4], [column 9 lines 4-9] for searching a database), the database including media objects and records of repeat instances of the media objects (see [column 9 lines 34-46], [column 10 lines 10-24] for storing media objects and matching (repeat) segments that have been archived and are available for retrieval).

Regarding claim 7, Kanevsky discloses all of the limitations of claim 1 including wherein the inferring comprises matching a key word from the request with metadata extracted from a media object (see [column 7 lines 22-26], [column 8 lines 49-52], [column 8 lines 61-66], [column 10 lines 50-53] for matching associated identity tags).

Regarding claim 9, Kanevsky discloses all of the limitations of claim 1 including wherein the inferring comprises limiting returned media object based on constraints contained within the request (see [column 5 lines 2-12], [column 7 lines 60-67], [column 10 lines 2-9] where the search can be limited to "N" best lists as defined by the requester).

Regarding claim 10, Kanevsky discloses all of the limitations of claim 1 including wherein the inferring comprises identifying temporal endpoints of each repeat instance of the media object (see [column 9 lines 40-46], [column 10 lines

16-20] for storing matching (repeating) segments; see also [column 3 lines 19-29]
where the start and end times are identified for all segments).

Regarding claim 13, Kanevsky discloses a processor-readable medium
comprising processor-executable instructions (see [column 2 lines 28-56])
configured for: receiving user input regarding a media object (see [column 1 line
57 through column 2 line 4], [column 8 lines 49-66] for receiving a user input for
searching media segments); sending a request for an additional media object
based on the user input (see [column 8 lines 49-66] processing the input query
and searching as a result); receiving the additional media object (see [column 9
lines 2-9] for obtaining audio segments as a result of the search); and rendering
the additional media object (see [column 3 lines 12-29] for processing (rendering)
audio data segments).

Regarding claim 15, Kanevsky discloses all of the limitations of claim 13
including a processor-readable medium comprising further processor-executable
instructions configured for rendering a media stream that includes the media
object (see [column 3 lines 12-29] for processing (rendering) the audio data as it
streams to determine the desired locations in the stream to be segmented).

Regarding claim 17, Kanevsky discloses a system comprising: a media
application (see [column 2 lines 31-35]) configured to render a media stream
(see [column 3 lines 12-29] for processing (rendering) the audio data as it
streams to determine the desired locations in the stream to be segmented); and
a user interface module configured to enable a user to enter a request for

additional media objects related to a media object from the media stream (see

[column 8 lines 54-61] for a user interface which allows a user to query and

retrieve desired audio segments).

Regarding claim 18, Kanevsky discloses all of the limitations of claim 17

including a system comprising an object identification module configured to

identify the media object within the request (see [column 8 lines 5-20], [column 9

line 50 through column 10 line 9] where before generating a voiceprint to initiate

a search it is determined whether or not the speaker (audio segment) can be

identified; see also [figure 1 #105], [column 3 line 66]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating
    obviousness or nonobviousness.

4.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky

et al. as applied to claim 1 above, and further in view of Ellis et al. (U.S. Patent No.

5,436,653).

            Regarding claim 3, Kanevsky discloses all of the limitations of claim 1

including wherein the inferring comprises: identifying the repeat instances (see

[columns 9 lines 34-46] for identifying matching segments); and storing records

of the repeat instances in a database (see [column 10 lines 16-20] for storing

matching segments for later retrieval).

            Kanevsky however does not explicitly teach wherein the inferring

comprises the monitoring of one or more media streams.

            Ellis however teaches a system for monitoring more than one broadcast

signal (media stream) (see [fig. 1], [column 8 lines 35-36], [column 9 lines 14-17]

where fig. 1 is described to depict the monitoring of multiple media streams).

            At the time the invention was made it would have been obvious, to one of

ordinary skill in the art, to monitor more than one broadcast signal, as taught in

Ellis, to infer matching (repeating) media objects, as taught in Kanevsky,

because doing such increase the scope of searchable media thus improving the

breadth of searchable information and system efficiency (see [column 4 lines 9-

13]).

5.   Assuming claims 5 and 6 have been interpreted properly, according to the intent

of the applicant, claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kanevsky et al. as applied to claim 1 above, and further in view of

Schultz (U.S. Patent No. 5,737,734).

Regarding claim 5, Kanevsky discloses all of the limitations of claim 1 but

does not explicitly teach wherein the inferring comprises determining a most-

related media object, the most-related media object being temporally adjacent to

the media object with a greater frequency of repeat instances than any other

media object.

Schultz however teaches determining media files that are most relevant to

the query topic (see [column 1 lines 38-55], [column 2 lines 57-67]).

At the time the invention was made it would have been obvious, to one of

ordinary skill in the art, to allow a user to query and retrieve a list of files most

relevant to the query topic in a manner readily identifiable by the user, as taught

in Shultz, when searching for matching media objects, as taught in Kanevsky,

because this would allow the user to readily identify media files most relevant to

the query topic (see [column 1 lines 50-55]).

Regarding claim 6, Kanevsky discloses all of the limitations of claim 1

including determining a number of related media objects (see [column 9 lines 34-

46] where multiple matching segments are identified; see also [column 7 lines

63-67] where each unique segment is identified and given an ID tag such that the

N-best list is generated where N represents a number of the best matching

segments).

Kanevsky does not explicitly teach wherein said related media objects occur within a close temporal proximity of the media object with a higher frequency of repeat instances relative to one another.

Shultz however does teach where media objects occur in an order of relevance such that the objects most relevant to the query topic are positioned in a manner relative to one another so they can be readily identified by the user (see [column 1 lines 38-55], [column 2 lines 57-67]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to combine the feature of allowing a user to query and retrieve a list of files relevant to the query topic in a manner readily identifiable by the user, as taught in Shultz, with providing the ability to number the resulting matching segments, as taught in Kanevsky, because this would allow the user to readily identify media files most relevant to the query topic (see [column 1 lines 50-55]).

6.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky et al. as applied to claim 1 above, and further in view of Bolle et al. (U.S. Patent No. 6,675,174 B1).

Regarding claim 8, Kanevsky discloses all of the limitations of claim 1 but does not teach wherein the inferring comprises limiting returned media objects based on constraints contained within the request.

Bolle however teaches where a search engine requests information (operates) on a target media stream and returns (produces) a report including the

data and time information documenting when each unique media event started
and ended.

At the time the invention was made it would have been obvious, to one of
ordinary skill in the art, that the date and time information retrieved from the
target media stream, as taught in Bolle, could be used in a search, as taught in
Kanevsky (see [column 10 lines 50-62]), because additional search criteria would
allow the user to further limit their search.

7.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over
Kanevsky et al. as applied to claim 10 above, and further in view of Ellis et al. (U.S.
Patent No. 5,436,653).

Regarding claim 11, Kanevsky discloses all of the limitations of claim 10
including wherein the identifying is based on an identifier included in the request,
the identifier selected from the group comprising: a finger print of the media
object (see [column 9 lines 30-40] for using a voiceprint/ selected segment to
retrieve a segment having similar acoustic information); and channel code
associated with the media object (see [column 10 lines 50-53] for performing a
search with a particular channel).

Kanevsky does not explicitly teach identifying based on an identifier
comprising a time stamp.

Ellis teaches identifying known broadcast segments by time (see [column
9 lines 59-61]).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to use an identifier with a time stamp, as taught in Ellis, to identify segments for retrieval, as taught in Kanevsky, because this is desirable information used to maintain a record of segment occurrences (see [column 9 lines 56-67]).

8.   Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky et al.

Regarding claim 12, Kanevsky discloses all of the limitations of claim 1 including the use of a computer comprising the processor-readable medium (see [column 2 lines 28-56] for using a computer platform).

Regarding claim 16, Kanevsky discloses all of the limitations of claim 3 including the use of a computer comprising the processor-readable medium (see [column 2 lines 28-56] for using a computer platform).

While Kanevsky does not explicitly disclose the use of a server computer as in claim 12 or a client computer as in claim 16 it is well know to one of ordinary skill in the art that a computer platform can function as a server or client computer (see [column 2 lines 33-39] where the (application) processor-readable medium can be uploaded to and executed by a machine having any suitable architecture).

9.   Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanevsky et al. as applied to claim 17 above, and further in view of Ellis et al. (U.S. Patent No. 5,436,653).

Regarding claim 19, Kanevsky discloses all of the limitations of claim 18 including a system further comprising an inference module configured to search a media stream and recognize matching (repeat) instance of media objects from the media stream (see [column 2 lines 57-66] for a type of media stream; [column 9 lines 34-46], [column 10 lines 10-24] for identifying matching (repeating) media segments).

Kanevsky does not explicitly teach monitoring a media stream.

Ellis teaches monitoring a form of media stream (a broadcast) (see column 4 lines 13-34] where an invention is uses to compare signatures, representing a monitored broadcast segment, with at least one of the known signatures to determine whether a match exist therein).

At the time the invention was made it would have been obvious, to one of ordinary skill in the art, to monitor a media stream, as taught in Ellis, to recognize matching audio segments, as taught in Kanevsky, because it is beneficial for users, such as advertisers, to know when their advertisements or their competitors advertisements have been aired without having to wait for archiving to take place (see [column 1 lines 9-27]).

Regarding claim 20, Kanevsky in view of Ellis discloses all of the limitations of claim 19 including a system further comprising a database configured to store media objects and information about the repeat instances (see [column 1 line 57 through column 2 line 4], [column 9 lines 4-9] for a database which stores segments (objects) and information), the inference

module further configured to receive the request for additional media objects and

to determine the additional media objects based on the repeat instances (see

[column 8 lines 54-61] for allowing a user to query and retrieve desired audio

segments; see also [column 9 lines 34-46], [column 10 lines 10-24] for identifying

matching (repeating) media segments).

Allowable Subject Matter

10.   The following is a statement of reasons for the indication of allowable subject

matter:

Regarding claim 4 applicant claims, in short, wherein the inferring, as

recited in claim 1, comprises comparing temporal lengths of repeat instances of

the media object to determine: a longest version; a number of longer versions; a

shortest version; and a number of shorter versions.

While prior art teaches the limitations of claim 1, prior art was not found to

teach comparing temporal lengths of repeat instances of the media object with

one another to determine different versions of the media object in the categories

mentioned.

For this reason claim 4 has been allowed.

Regarding claim 14 applicant claims, in short, wherein the request for

information, as recited in claim 13, specifies information comprising: a current

media station delivering the media object; an identifier of the media object; a

command to retrieve a number of media objects that each include a portion of the

media object; a command to retrieve a longest media object that includes a

portion of the media object; a command to retrieve a number of related media

objects; a command to retrieve a number of most popular media objects; a

command to search across like media stations and a command to search across

all media stations.

　　　　While prior art teaches the limitations of claim 13, prior art was not found

to teach user requests0 specifying the group of information mentioned.

　　　　For this reason claim 14 has been allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason Thomas whose telephone number is (571) 270-

5080. The examiner can normally be reached on Mon. - Thurs., 8:00a.m. - 5:00p.m.

EST.

　　　　If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

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Supervisory Patent Examiner, Art Unit 4126